UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
NGUYEN BA, HOANG VU A

ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/756,347	LIENHARD ET AL.
	Examiner	Art Unit	
	Hoang-Vu A. Nguyen-Ba	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 December 2004.*

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,7,10 and 12-15* is/are rejected.

7)☒ Claim(s) *6,8,9 and 11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 January 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the amendment filed

2.   Claims 1 and 3-15 remain pending. Claims 1 and 13 are independent claims.

Response to Amendments

3.   Per Applicants' request, Claims 1 and 13 have been amended.

Response to Arguments

4.   Applicants' arguments have been fully considered but they are moot in view of new grounds of rejection presented hereinafter.

Drawings

4.   The drawings are objected to because of the following minor informalities:

a.   in FIG. 1, the term "Assistents" is mistyped.

b.   In FIGs. 1 and 2, the reference number 2 is used to designate the item "IvyWeb." This reference number is used to designate a different item (i.e., "Servlet") in the specification. See [0041].

Appropriate correction is required.

Specification

5.   The specification is objected to because of the following minor informalities:

The use of trademarks, such as HTML, XML ([0011]); Apache, IIS, Microsoft (0019] has been noted in this application. Trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the

proprietary nature of the marks should be respected and every effort made to prevent their use in a manner which might adversely affect their validity as trademarks.

To expedite correction on this matter, the examiner suggests the following guidelines for Applicant to follow in amending the specification:

    i.   capitalize each letter of a trademark or accompany the trademark with an appropriate designation symbol, e.g., ™ or ®, as appropriate;

    ii.   use each trademark as an adjective modifying a description noun. For example, it would be appropriate to recite "the JAVA platform" or "the JAVA programming language." Note that in these examples, "platform" and "programming language" provide accompanying generic terminology, describing the context in which the trademark is used. By itself, the trademark JAVA specifies only the source of the so-labeled products, namely SUN Microsystems, Inc.

6.   The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which Applicant may become aware in the specification.

Claim Rejections -- 35 U.S.C. § 112

7.   The following is a quotation of the first paragraph of 35 U.S.C. §112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8.   Claims 1-13 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 (lines 19-20) recites the limitation "without transformation, interpretation, or code generation" and Claim 13 (line 18) recites the limitation "without compilation, interpretation, or code generation." Contrarily to Applicants' assertions in the Remarks, filed December 15, 2004, at page 6, lines 26-30, these limitations do not appear to have support from the specification. Furthermore, it should be noted that in the context of obtaining directly a runtime implementation of a workflow application (as recited in Claims 1 and 13) by uploading a final prototype of the application defined by a process model, the process of uploading a file is commonly known in the art to be merely a process of transmitting that does not require any code translation. Therefore, any arguments that the step of obtaining the runtime implementation of an application "without transformation, interpretation, or code generation" provides a patentable distinction over the prior art are not persuasive because the recitation of the feature (the feature is by itself not a patentable feature) is one of a negative limitation and one of a mere statement of obviousness.

Claims 2-12 and 14-15, which depend from Claims 1 and 13, respectively, are also rejected for the same reason.

9.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10.   Claims 1, 3, 4, 8, 13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the desired workflow application" at line 11.
This limitation lacks proper antecedent basis.

Claim 1 recites the limitation "the implemented mode" at line 26. This
limitation lacks proper antecedent basis.

Claims 3 and 4 recite the limitation "may be" in line 3. The recitation of the
limitation is in permissive language. The broadest reasonable interpretation of this
limitation is that the "the process or process model ... may be modified by graphical
means" (Claim 3) and "the prototype may be several times modified... " (Claim 4) are
optional features. The use of the verb "may be" renders these claims indefinite.
Accordingly, any arguments that these features provide patentable distinction over the
prior art will be unpersuasive.

Claim 8 recites the limitation "or similar pages" in "the dialog pages ... are
common HTML, XML, or similar pages." The phrase "or similar pages" was held to
be indefinite since it was not clear what applicants intended to cover by the recitation
"or similar pages." Ex parte Kristensen, 10 USPQ2d 1701 (Bd. PA&I. 1989).

Claim 13 recites the limitation "the desired process" at line 13. This limitation
lacks proper antecedent basis.

Claim 13 recites the limitation "said designed prototype" at line 14. This
limitation lacks proper antecedent basis.

Claim 13 recites the limitation "said process" at line 22. This limitation lacks
proper antecedent basis.

Claim 15 recites the limitation "the design mode" at lines 2-3. This limitation
lacks proper antecedent basis.

Claim Rejections – 35 USC § 103

11.   The following is a quotation of the 35 U.S.C. § 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not negatived by the manner in which the invention was made.

12.   Claims 1, 3-5, 7, 10 and 12-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Developing a WFT Workflow System ("WFT"), WFT Version 8.0, Second Edition, October 31, 1997 in view of Ames et al. ("Ames"), Applications of Web-Based Workflow, 1998, IEEE.

Claim 1

WFT discloses at least a method for modeling and implementing an applicaton, using a computerized process model and a computerized interface for implementing said model as a runtime application, wherein

said workflow application is defined by more than one process or process model, in particular by a process or process model supporting content management of said workflow application (see at least FIG. 2-4; p. 2-14; chapter 8; chapter 9, Managing WFT workflow systems),

in a design or prototyping mode, said process model is graphically drawn up according to the desired workflow application by using an extendable set of graphical building blocks and a preferably automated dialog for defining information needed by the process (see at least chapter 8, FIGs. 8-1, 8-2, 8-3, 8-4, 8-8),

entering the data corresponding to said information needed (see at least p. 8-4, last 2 ¶¶ to 8-5, 1ˢᵗ two ¶¶s; p. 8-8, step 5; p. 8-11, Specifying Quantities),

animating and/or testing the thus designed prototype of said workflow application (see at least p. 8-3, 2nd ¶),

obtaining directly and without transformation, interpretation, or code generation a run-time implementation of said workflow application by uploading the final prototype of said application defined by said process model via said interface into a server or a computer network (see at least p. 2-12, 5th ¶, p. 6-2, 6th ¶, p. 8-2, last ¶ where it is shown that the user can run the simulation of his/her WFT workflow system at any stage in the development process after he/she has created his/her workflow design – *prototype of said application defined by said process model via said interface* --; the state of completion of the other phases of the WFT development process – *without transformation, interpretation, or code* generation -- has no impact on the ability to simulate the running of the workflow system – *runtime implementation of workflow application*) *and*

in an implementing mode, executing said run-time workflow application through said server or computer network, whereby both in the design mode and the implementing mode the same extendable set of graphical building blocks are used (see at least chapter 8).

WFT does not specifically disclose *said web application is a workflow application.* However, Ames teaches a web-based workflow system for the purpose of providing a process mediation with which users can interact using their Web browser, tool that most users already have and know how to use, to check their "TODO" list and read Task Descriptions about assignments (Ames; Abstract, sections 1 and 2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify WFT using the teaching of web-based workflow system developed by Ames et al. at the Jet Propulsion Laboratory for the purpose discussed above.

Claim 13

WFT discloses an integrated, computerized system for modeling and implementing a workflow application via a graphical process model using an extendable set of building blocks and an interface for implementing said model, including:

means for displaying and animating said graphical process model (see at least p. 8-3, 2nd ¶, p. 8-21 & FIG. 8-8);

means for executing automated dialogs between a designer and said graphical process model, including means for entering data into said graphical process model and means for controlling changes of said graphical process model to develop and/or amend a prototype of the desired process (see at least FIG. 8-2 and 8-3),

means for directly executing said designed prototype without programming, including means for animating and/or testing said prototype (see at least p. 8-19),

means for implementing said process model directly and without compilation, interpretation, or code generation, as run-time implementation of said workflow application using said same extendable set of building blocks by uploading the final prototype of said process via said interface into a server or computer network (see at least p. 2-12, 5th ¶, p. 6-2, 6th ¶, p. 8-2, last ¶ where it is shown that the user can run the simulation of his/her WFT workflow system at any stage in the development process after he/she has created his/her workflow design -- *prototype of said application defined by said process model via said interface* --; the state of completion of the other phases of the WFT development process -- *without transformation, interpretation, or code* generation -- has no impact on the ability to simulate the running of the workflow system -- *runtime implementation of workflow application*).

WFT does not specifically disclose a *web-based* application. However, Ames teaches a web-based workflow system for the purpose of providing a process

mediation with which users can interact using their Web browser, tool that most users already have and know how to use, to check their "TODO" list and read Task Descriptions about assignments (Ames; Abstract, sections 1 and 2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify WFT using the teaching of web-based workflow system developed by Ames et al. at the Jet Propulsion Laboratory for the purpose discussed above.

Claims 3 and 15

WFT further discloses *wherein in the design mode, the process or process model is graphically displayed and may be modified by graphical means and/or elements* (see at least FIG. 8-2 and 8-3).

Claim 4

WFT further discloses *wherein in the design mode, and before starting the implementing mode, the prototype may be several times modified and/or re-designed until a desired function or functional objective is reached* (see at least FIG. 8-4).

Claim 5

WFT further discloses *wherein in the design mode, the preferably automated dialog is designed as a step-by-step dialog and the displayed process proceeds accordingly whenever data is entered* (see at least p. 8-19, e.g., ... you can run a simulation one event at a time – called stepping.").

Claims 7 and 14

WFT does not specifically disclose *wherein both in design and the run-time mode, the interaction with a designer/user of an application is carried out via a common Internet browser* (Claim 7) and *wherein the server or computer network is connected to the Internet or an Intranet.*

However, Ames teaches a web-based workflow system for the purpose of providing a process mediation with which users can interact using their Web browser (run on a computer that is connected to a LAN, WAN or Internet), tool that most users already have and know how to use, to check their "TODO" list and read Task Descriptions about assignments (Ames; Abstract, sections 1 and 2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify WFT using the teaching of web-based workflow system developed by Ames et al. at the Jet Propulsion Laboratory for the purpose discussed above.

Claim 10

WFT further discloses *wherein a process or sub-process is executed as run-time application in a distributed way on the client machines instead of on the server* (see at least FIG. 2-3 and definition of a Server at p. 1-22).

Claim 12

WFT further discloses *wherein a process model is not defining the application itself but rather its management and administration, particularly for so-called content management* (see at least p. 9-2 to 9-5).

Allowable Subject Matter

13.   Claims 6, 8, 9, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14.   The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

15.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (571) 272-3701. The examiner can normally be reached on the following days of a bi-week: Monday-Thursday (first week) and Tuesday-Friday (second week) from 7:15 am to 5:45 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Tuan Dam can be reached at (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the
Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

ANTONY NGUYEN-BA
PRIMARY EXAMINER
January 10, 2006